

Appl. No. 09/348,891
Amendment

REMARKS

Claims 1-4, 6 and 7 are pending in the present application. Claims 1, 4, 6 and 7 are independent, and have been amended herein.

In the Office Action, claims 1-4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,700,989 to Itoh et al. (hereinafter referred to as "Itoh").

Applicants submit that claim 1 is not anticipated by Itoh at least because claim 1 recites:

accumulating, in a transform domain, spatially corresponding coefficients of a plurality of pictures of one frame of the video signal, wherein a picture is an array of pixels having the same size as the watermark;

inverse transforming said accumulated coefficients into an accumulated plurality of pictures in the spatial domain; and

detecting the watermark in said accumulated plurality of pictures

(emphasis added).

As described in the Specification of the present application as filed, a "conventional MPEG decoder includes a large input buffer for converting the nearly constant bitrate of the MPEG bitstream." (Specification at page 3, lines 3-4). With the presently claimed invention, "[b]y interchanging the order of inverse transform and accumulation, the variable-length decoding can be carried out at the input bitrate [with the] variable-length decoder [being] considerably simplified and the large input buffer can be dispensed with." (Specification at page 3, lines 6-9). Thus, the claimed invention beneficially reverses the typical order employed during watermark detection (inverse transforming and then accumulating) with the claimed order of

Appl. No. 09/348,891
Amendment

accumulating, and then inverse transforming. By way of the claimed invention, a plurality of pictures with an embedded watermark is accumulated in a transform domain, an inverse transform is applied to the accumulated result, and watermark detection is then applied to the accumulated plurality of pictures in the spatial domain. (Specification at page 5, lines 8-14).

Itoh does not teach or suggest "accumulating, in a transform domain, spatially corresponding coefficients of a plurality of pictures of one frame of the video signal," and then "inverse transforming said accumulated coefficients into an accumulated plurality of pictures in the spatial domain," and "detecting the watermark in said accumulated plurality of pictures." Itoh merely describes a conventional method of inverse transforming a bitstream, where, as pointed out in the office Action, "compressed data are expanded by an MPEG decoder 56." Itoh at column 29, lines 55-56. At most, Itoh describes conventionally accumulating images in the spatial domain, subsequent to inverse transforming the bitstream. In stark contrast, the claimed invention recites accumulating in a transform domain, prior to inverse transforming.

In addition, applicants submit that claim 1 is not anticipated by Itoh at least because claim 1 recites "accumulating spatially corresponding coefficients of a plurality of pictures of one frame of the video signal, wherein a picture is an array of pixels having the same size as the watermark." Itoh does not teach or suggest accumulating spatially corresponding coefficients of a plurality of pictures of one frame of the video signal, as recited in claim 1.

Accordingly, Itoh does not teach every element of claim 1 and is therefore not anticipated by Itoh for at least these reasons. Applicants respectfully request that the Examiner withdraw this rejection.

Appl. No. 09/348,891
Amendment

Applicants submit that claim 7 is also not anticipated by Itoh, at least because claim 7 recites, "accumulating, in a transform domain, spatially corresponding coefficients of at least one picture," and then "inverse transforming said accumulated coefficients into an accumulated plurality of pictures in the spatial domain." As described above, Itoh does not teach or suggest these features.

Moreover, claim 7 is not anticipated by Itoh for the additional reason that claim 7 recites accumulating coefficients and having as a result less data than one frame of the video signal. Instead, Itoh teaches decoding P and B frames, which results in more data as a result of accumulation with an I frame. Accordingly, applicants respectfully submit that claim 7 is not anticipated by Itoh for at least these reasons, and earnestly request entrance and allowance of this claim.

Independent claims 4 and 6 recite features similar to claim 1, and are therefore not anticipated by Itoh for at least the reason discussed above with respect to claim 1. Accordingly, applicants respectfully submit that claims 4 and 6 are in condition for allowance and request that the Examiner withdraw those rejections.

Claims 2 and 3 depend either directly or indirectly from claim 1 and are therefore not anticipated by Itoh for at least the reason discussed above with respect to claim 1.

Accordingly, applicants respectfully submit that claims 2 and 3 are in condition for allowance and request that the Examiner withdraw those rejections.

Moreover, applicants submit that claim 2 is patentable over Itoh for additional

Appl. No. 09/348,891
Amendment

reasons. For example, claim 2 recites a method wherein "accumulating coefficients is applied to the coefficients representing said residual pictures irrespective of coefficients representing the prediction picture." Applicants submit that Itoh does not describe "accumulating coefficients is applied to the coefficients representing said residual pictures irrespective of coefficients representing the prediction picture." Indeed, the portion of Itoh cited in the Office Action as being pertinent merely describes a method wherein "compressed data are expanded by an MPEG decoder 56." Itoh at column 29, lines 55-56.

Accordingly, applicants respectfully submit that for this additional reason, claim 2 is in condition for allowance and request that the Examiner withdraw that rejection.

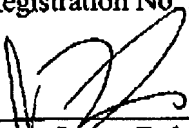
Appl. No. 09/348,891
Amendment

In view of the foregoing, it is respectfully submitted that the currently-pending claims are in condition for allowance and favorable consideration is earnestly solicited.

Respectfully submitted,

Paul Im
Registration No. 50,418

Date: 6 Nov. 2007


By: James Dobrow
Attorney for Applicant
Registration No. 46,666

Mail all correspondence to:

Paul Im, Registration No. 50,418
US PHILIPS CORPORATION
P.O. Box 3001
Briarcliff Manor, NY 10510-8001
Phone: (914) 333-9627
Fax: (914) 332-0615